

USSN: 10/075,715

Attorney Docket No.: 1059.00073

**CLAIMS:**

1. (Currently amended) A method of affecting ~~promoting~~ neurogenesis comprising the step of:

administering a therapeutic amount of a therapeutic compound for increasing levels of cGMP to a patient in need of neurogenesis ~~promotion~~ post stroke wherein increased levels of cGMP result in ~~promote~~ neurogenesis.

2. (Currently amended) A compound for affecting ~~promoting~~ neurogenesis comprising an effective amount of a therapeutic compound selected from the group of phosphodiesterase inhibitors, L-arginine, sildenafil, and atorvastatin that increases levels of cGMP, sufficient to affect ~~promote~~ neurogenesis, wherein increased levels of cGMP result in ~~promote~~ neurogenesis.

3. (Currently amended) A neurogenesis affector ~~promoter~~ comprising a therapeutic compound in a pharmaceutically acceptable carrier that increases levels of cGMP, said therapeutic compound capable of affecting ~~promoting~~ neurogenesis wherein increased levels of cGMP result in ~~promote~~ neurogenesis.

4. (Currently amended) The neurogenesis affector ~~promoter~~ according to claim 3, wherein said therapeutic compound augments nitric oxide in a tissue.

5. (Currently amended) The neurogenesis affector ~~promoter~~ according to claim 4, wherein said nitric oxide donor is selected from the group consisting ~~essentially~~ of phosphodiesterase inhibitors, L-arginine, sildenafil, and atorvastatin.

6. (Previously presented) A method of augmenting the production of neurons by administering an effective amount of a therapeutic compound that increases levels of cGMP, to a site in need of augmentation, wherein increased levels of cGMP augment the production of neurons.

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7. (Previously presented) A method of increasing neurological function by administering an effective amount of a therapeutic compound that increases levels of cGMP to a patient in need of increased neurological function after neurological damage has occurred, whereby the increased levels of cGMP create neurogenesis, thereby increasing neurological function.

8. (Previously presented) A method of increasing cognitive and neurological function by administering an effective amount of a therapeutic compound for increasing levels of cGMP to a patient in need of increased cognitive and neurological function after neurological and cognitive damage has occurred, whereby the increased levels of cGMP create neurogenesis, thereby increasing neurological function.

9. (Currently amended) A method of affecting ~~promoting~~ neurogenesis comprising the step of administering an effective amount of a compound for increasing levels of cGMP in a patient in need of neurogenesis ~~promotion~~, wherein increased levels of cGMP result in ~~promote~~ neurogenesis.

10. (Previously presented) A method of augmenting the production of neurons by administering an effective amount of a compound for increasing cGMP levels at a site in need of augmentation, wherein increased levels of cGMP augment the production of neurons.

11. (Previously presented) A method of increasing neurological function by administering an effective amount of a compound for increasing levels of cGMP in a patient in need of increased neurological function, wherein increased levels of cGMP increase neurological function.

12. (Currently amended) A method of increasing cognitive and neurological function by administering an effective amount of a compound for increasing levels of cGMP in a patient in need of increased cognitive and

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neurological function, wherein increased levels of cGMP result in ~~promote~~ neurogenesis, thereby increasing cognitive and neurological function.

13. (Currently amended) A compound for increasing *in vivo* levels cGMP for use in generating neurons, wherein increased levels of cGMP result in ~~promote~~ neurogenesis.